

MLA150 Quick Start

- 1. Transfer design:** Transfer your design file to the tool via Nanofiles FTP
- 2. Setup job:** Enter the job **Name** (LastnameFirstinitial_Jobname or Companyname_Jobname) and select the **Exposure Mode**.
- 3. Substrate:** Select the **Substrate Template**; there are specific optical and pneumatic templates depending on the substrate size, shape and thickness (reference the visual aid and SOP at the tool).
IMPORTANT: Selecting the wrong template can result in a lens crash!!
- 4. Layer:**
 - For First Layer (no alignment): Enter info in the “First Exposure” row.
 - For subsequent layers (with alignment): Enter info into the “2nd Layer” row via [Add Layer].
 - Enter information about the layer being exposed; **Laser Wavelength, Laser Power, Focus Mode** (must be same as Sub Template).
- 5. Converting design:** Follow instructions to convert Design, and Load Design.
- 6. Alignment Settings (and Exposure bitmaps):**
 - For exposing alignment marks, use **Exposure Bitmaps** – this option is available if you do not have alignment marks added in your first layer CAD design, the tool can expose Marks for you.
 - **Alignment Settings** allows you to enter coordinates for alignment mark locations used for aligning to previous layers.
- 7. Focus Mode:** Set to “Optical” **IMPORTANT to prevent lens crash!** Use Pneumatic only if authorized & it matches your Substrate Template.
- 8. Resist:** Always select the “_Generic Focus” resist profile.
- 9. HAR** “High Aspect Ratio” is always **Off**.
- 10. Load substrate:**
 - Follow instructions regarding loading the substrate
 - Turn on the stage vacuum
- 11. Prior to Exposure:**
 - Make sure all info regarding the job is correct (design, laser, exposure dose, focus, etc.)
- 12. Alignment:**
 - Perform alignment to Alignment marks (if needed).
 - **[Move to First Cross]** and then **[Measure]** & **[Accept Position]**
- 13. Exposure:** Click “**Start Exposure**” and wait until the job is complete.
- 14. Unloading:** Unload the substrate and enter log book info for your job.